

## General

### Title

Stable coronary artery disease: percentage of patients with stable coronary artery disease who are prescribed aspirin and anti-atherosclerotic medications.

### Source(s)

Goblirsch G, Bershow S, Cummings K, Hayes R, Kokoszka M, Lu Y, Sanders D, Zarling K. Stable coronary artery disease. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2013 May. 71 p. [98 references]

## Measure Domain

### Primary Measure Domain

Clinical Quality Measures: Process

### Secondary Measure Domain

Does not apply to this measure

## Brief Abstract

### Description

This measure is used to assess the percentage of patients age 18 years and older with stable coronary artery disease who are prescribed aspirin and anti-atherosclerotic medications.

### Rationale

The priority aim addressed by this measure is to increase the percentage of patients age 18 years and older with a diagnosis of stable coronary artery disease who are prescribed aspirin and anti-atherosclerotic medications.

Antiplatelet Therapy. Aspirin dose in the range of 75 to 150 mg should be given for the long-term prevention of serious vascular events in high-risk patients, and there may be a reduced benefit when increasing the dose over 150 mg daily. Doses available to most clinicians are in increments of 81 mg; therefore, the recommended dose is 81 mg daily.

Patients for whom aspirin is contraindicated (or insufficient) should be treated with clopidogrel 75 mg daily indefinitely.

**Statins.** Benefit has been demonstrated in all stable coronary artery disease patients treated with statins, regardless of pretreatment cholesterol levels. This was well demonstrated in the MRC/BHF Heart Protection Study. Simvastatin was shown to reduce major cardiovascular events, including death, non-fatal myocardial infarction, and stroke by 15% to 20% in the subgroup of patients with pretreatment levels of less than 100 mg/dL. A similar reduction in events was also observed in patients without documented coronary artery disease, but with peripheral vascular disease, diabetes or hypertension.

Every effort should be made to ensure all patients with coronary artery disease receive optimal lipid therapy. Statin medications are strongly supported as first-line medications due to compelling evidence of mortality reduction from multiple clinical trials.

**As-needed Nitrates.** In patients with mild stable coronary artery disease, drug therapy may be limited to short-acting sublingual nitrates on an as-needed basis. Use of lower dose (e.g., 0.3 mg or one-half of a 0.4 mg tablet) may reduce the incidence of side effects such as headache or hypotension in susceptible patients.

**Beta-blocking Agents.** Beta-blockers should be used in all status post-myocardial infarction patients, based on studies showing mortality reduction. They are also the preferred first-line therapy for reducing symptoms of angina in patients with stable coronary artery disease.

**Ranolazine.** Ranolazine is a stand-alone late sodium channel blocker; it relieves stable angina symptoms and increases exercise tolerance. It demonstrates antianginal and anti-ischemic effects without changing hemodynamic parameters (heart rate or blood pressure). Consider the use of ranolazine when beta-blockers, calcium channel blockers and nitrates are not adequately effective or are not tolerated.

## Evidence for Rationale

Antiplatelet Trialists' Collaboration. Collaborative overview of randomised trials of antiplatelet therapy - I: Preparation of death, myocardial infarction, and stroke by prolonged antiplatelet therapy in various categories of patients. *BMJ*. 1994;38:81-106.

CAPRIE Steering Committee. A randomised, blinded, trial of clopidogrel versus aspirin in patients at risk of ischaemic events (CAPRIE). *Lancet*. 1996 Nov 16;348(9038):1329-39. [PubMed](#)

Cucherat M, Boissel JP, Leizorovicz A. Persistent reduction of mortality for five years after one year of acebutolol treatment initiated during acute myocardial infarction. The APSI Investigators. Acebutolol et Prevention Secondaire de l'Infarctus. *Am J Cardiol*. 1997 Mar 1;79(5):587-9. [PubMed](#)

Frye RL, Gibbons RJ, Schaff HV, Vlietstra RE, Gersh BJ, Mock MB. Treatment of coronary artery disease. *J Am Coll Cardiol*. 1989 Apr;13(5):957-68. [172 references] [PubMed](#)

Fuster V, Dyken ML, Vokonas PS, Hennekens C. Aspirin as a therapeutic agent in cardiovascular disease. Special Writing Group. *Circulation*. 1993 Feb;87(2):659-75. [192 references] [PubMed](#)

Goblirsch G, Bershow S, Cummings K, Hayes R, Kokoszka M, Lu Y, Sanders D, Zarling K. Stable coronary artery disease. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2013 May. 71 p. [98 references]

Harrington RA, Becker RC, Ezekowitz M, Meade TW, O'Connor CM, Vorchheimer DA, Guyatt GH. Antithrombotic therapy for coronary artery disease: the Seventh ACCP Conference on Antithrombotic and Thrombolytic Therapy. *Chest*. 2004 Sep;126(3 Suppl):513S-48S. [164 references] [PubMed](#)

Heart Protection Study Collaborative Group. MRC/BHF Heart Protection Study of cholesterol lowering with simvastatin in 20,536 high-risk individuals: a randomised placebo-controlled trial. Lancet. 2002 Jul 6;360(9326):7-22. [PubMed](#)

Hunninghake DB. Therapeutic efficacy of the lipid-lowering armamentarium: the clinical benefits of aggressive lipid-lowering therapy. Am J Med. 1998 Feb 23;104(2A):9S-13S. [PubMed](#)

Juul-Moller S, Edvardsson N, Jahnmatz B, Rosen A, Sorensen S, Omblus R. Double-blind trial of aspirin in primary prevention of myocardial infarction in patients with stable chronic angina pectoris. The Swedish Angina Pectoris Aspirin Trial (SAPAT) Group. Lancet. 1992 Dec 12;340(8833):1421-5. [PubMed](#)

Kurth T, Glynn RJ, Walker AM, Chan KA, Buring JE, Hennekens CH, Gaziano JM. Inhibition of clinical benefits of aspirin on first myocardial infarction by nonsteroidal antiinflammatory drugs. Circulation. 2003 Sep 9;108(10):1191-5. [PubMed](#)

Ridker PM, Manson JE, Gaziano JM, Buring JE, Hennekens CH. Low-dose aspirin therapy for chronic stable angina. A randomized, placebo-controlled clinical trial. Ann Intern Med. 1991 May 15;114(10):835-9. [PubMed](#)

Sacks FM, Pfeffer MA, Moya LA, Rouleau JL, Rutherford JD, Cole TG, Brown L, Warnica JW, Arnold JM, Wun CC, Davis BR, Braunwald E. The effect of pravastatin on coronary events after myocardial infarction in patients with average cholesterol levels. Cholesterol and Recurrent Events Trial investigators. N Engl J Med. 1996 Oct 3;335(14):1001-9. [PubMed](#)

Scandinavian Simvastatin Survival Study Group. Randomised trial of cholesterol lowering in 4444 patients with coronary heart disease: the Scandinavian Simvastatin Survival Study (4S). Lancet. 1994 Nov 19;344(8934):1383-9. [PubMed](#)

Shub C. Stable angina pectoris: 1. Clinical patterns. Mayo Clin Proc. 1990 Feb;65(2):233-42. [46 references] [PubMed](#)

## Primary Health Components

Stable coronary artery disease; aspirin

## Denominator Description

Number of stable coronary artery disease patients (see the related "Denominator Inclusions/Exclusions" field)

## Numerator Description

Number of stable coronary artery disease patients who are prescribed aspirin and anti-atherosclerotic medications (see the related "Numerator Inclusions/Exclusions" field)

## Evidence Supporting the Measure

### Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

## Additional Information Supporting Need for the Measure

Unspecified

## Extent of Measure Testing

Unspecified

## National Guideline Clearinghouse Link

[Stable coronary artery disease.](#)

## State of Use of the Measure

### State of Use

Current routine use

### Current Use

not defined yet

## Application of the Measure in its Current Use

### Measurement Setting

Ambulatory/Office-based Care

### Professionals Involved in Delivery of Health Services

not defined yet

### Least Aggregated Level of Services Delivery Addressed

Clinical Practice or Public Health Sites

### Statement of Acceptable Minimum Sample Size

Unspecified

### Target Population Age

Age greater than or equal to 18 years

### Target Population Gender

Either male or female

# National Strategy for Quality Improvement in Health Care

## National Quality Strategy Aim

Better Care

## National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

# Institute of Medicine (IOM) National Health Care Quality Report Categories

## IOM Care Need

Living with Illness

## IOM Domain

Effectiveness

# Data Collection for the Measure

## Case Finding Period

The time frame pertaining to data collection is monthly.

## Denominator Sampling Frame

Patients associated with provider

## Denominator (Index) Event or Characteristic

Clinical Condition

Patient/Individual (Consumer) Characteristic

## Denominator Time Window

not defined yet

## Denominator Inclusions/Exclusions

### Inclusions

Number of stable coronary artery disease patients

Population Definition: All patients age 18 and older with stable coronary artery disease diagnosis.

### Exclusions

Patients with documented contraindications to aspirin should be excluded from the denominator of this measure.

## Exclusions/Exceptions

not defined yet

## Numerator Inclusions/Exclusions

### Inclusions

Number of stable coronary artery disease patients who are prescribed aspirin and anti-atherosclerotic medications

### Exclusions

Contraindications to aspirin use are not defined in the guideline\*, but left to the provider's discretion. Some commonly found contraindications are allergy to the drug and history of bleeding ulcer or gastric hemorrhage. When contraindications are present, they need to be noted in the patient's record.

\*Refer to the [National Guideline Clearinghouse \(NGC\)](#) summary of the Institute for Clinical Systems Improvement (ICSI) [Stable Coronary Artery Disease](#)  guideline.

## Numerator Search Strategy

Fixed time period or point in time

## Data Source

Paper medical record

## Type of Health State

Does not apply to this measure

## Instruments Used and/or Associated with the Measure

Unspecified

## Computation of the Measure

## Measure Specifies Disaggregation

Does not apply to this measure

## Scoring

Rate/Proportion

## Interpretation of Score

Desired value is a higher score

## Allowance for Patient or Population Factors

not defined yet

## Standard of Comparison

not defined yet

## Identifying Information

### Original Title

Percentage of patients with stable coronary artery disease who are prescribed aspirin and anti-atherosclerotic medications.

### Measure Collection Name

Stable Coronary Artery Disease

### Submitter

Institute for Clinical Systems Improvement - Nonprofit Organization

### Developer

Institute for Clinical Systems Improvement - Nonprofit Organization

### Funding Source(s)

The Institute for Clinical Systems Improvement's (ICSI's) work is funded by the annual dues of the member medical groups and five sponsoring health plans in Minnesota and Wisconsin.

### Composition of the Group that Developed the Measure

*Work Group Members:* Greg Goblirsch, MD (*Work Group Leader*) (River Falls Clinic) (Family Medicine); Spencer Bershow, MD (Fairview Health Services) (Family Medicine); Yun Lu, PharmD, MS (Hennepin County Medical Center) (Pharmacy); Kathy Zarling, RN, MS, CNS (Mayo Clinic) (Nursing); Marek Kokoszka, MD (Park Nicollet Health Services) (Cardiology); Debra M. Sanders, RD (River Falls Medical Clinic) (Dietetics); Kathy Cummings, RN, BSN, MA (Institute for Clinical Systems Improvement [ICSI]) (Project Manager); Rochelle Hayes, BS (ICSI) (Systems Improvement Coordinator)

## Financial Disclosures/Other Potential Conflicts of Interest

The Institute for Clinical Systems Improvement (ICSI) has long had a policy of transparency in declaring potential conflicting and competing interests of all individuals who participate in the development, revision and approval of ICSI guidelines and protocols.

In 2010, the ICSI Conflict of Interest Review Committee was established by the Board of Directors to review all disclosures and make recommendations to the board when steps should be taken to mitigate potential conflicts of interest, including recommendations regarding removal of work group members. This committee has adopted the Institute of Medicine Conflict of Interest standards as outlined in the report Clinical Practice Guidelines We Can Trust (2011).

Where there are work group members with identified potential conflicts, these are disclosed and discussed at the initial work group meeting. These members are expected to recuse themselves from related discussions or authorship of related recommendations, as directed by the Conflict of Interest committee or requested by the work group.

The complete ICSI policy regarding Conflicts of Interest is available at the [ICSI Web site](#)

### Disclosure of Potential Conflicts of Interest

Spencer Bershow, MD (Work Group Member)  
Family Medicine, Fairview Health Services  
National, Regional, Local Committee Affiliations: None  
Guideline Related Activities: None  
Research Grants: None  
Financial/Non-Financial Conflicts of Interest: None

Greg T. Goblirsch, MD (Work Group Leader)  
Medical Director, Family Medicine, River Falls Clinic  
National, Regional, Local Committee Affiliations: None  
Guideline Related Activities: None  
Research Grants: None  
Financial/Non-Financial Conflicts of Interest: None

Marek J. Kokoszka, MD (Work Group Member)  
Chair, Cardiology, Park Nicollet Health Services  
National, Regional, Local Committee Affiliations: None  
Guideline Related Activities: Acute Coronary Artery Disease (ICSI)  
Research Grants: None  
Financial/Non-Financial Conflicts of Interest: None

Yun Lu, PharmD, MS  
Clinical Pharmacist, Cardiology, Hennepin County Medical Center  
National, Regional, Local Committee Affiliations: None  
Guideline Related Activities: None  
Research Grants: None  
Financial/Non-Financial Conflicts of Interest: None

Debra M. Sanders, RD (Work Group Member)  
Registered Dietician, Diabetes Educator, River Falls Medical Clinic  
National, Regional, Local Committee Affiliations: None  
Guideline Related Activities: None  
Research Grants: None  
Financial/Non-Financial Conflicts of Interest: Registered Dietician Consultant, Lutheran Home, Long Term Care



Kathy Zarling, RN, MS, CNS (Work Group Member)  
Cardiovascular Clinical Nurse Specialist, Mayo Clinic  
National, Regional, Local Committee Affiliations: None  
Guideline Related Activities: None  
Research Grants: None  
Financial/Non-Financial Conflicts of Interest: None

## Adaptation

This measure was not adapted from another source.

## Date of Most Current Version in NQMC

2013 May

## Measure Maintenance

Scientific documents are revised every 12 to 24 months as indicated by changes in clinical practice and literature.

## Date of Next Anticipated Revision

The next scheduled revision will occur within 24 months.

## Measure Status

This is the current release of the measure.

This measure updates a previous version: Institute for Clinical Systems Improvement (ICSI). Stable coronary artery disease. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2011 Apr. 58 p.

The measure developer reaffirmed the currency of this measure in January 2016.

## Measure Availability

Source available for purchase from the [Institute for Clinical Systems Improvement \(ICSI\) Web site](#)

. Also available to ICSI members for free at the [ICSI Web site](#)

and to Minnesota health care organizations free by request at the [ICSI Web site](#)

For more information, contact ICSI at 8009 34th Avenue South, Suite 1200, Bloomington, MN 55425; Phone: 952-814-7060; Fax: 952-858-9675; Web site: [www.icsi.org](http://www.icsi.org) ; E-mail: [icsi.info@icsi.org](mailto:icsi.info@icsi.org).

## NQMC Status

This NQMC summary was completed by ECRI on July 14, 2004.

This NQMC summary was updated by ECRI Institute on June 9, 2005, June 29, 2006, June 4, 2007, November 18, 2009, October 29, 2012, and again on January 20, 2014.

The information was reaffirmed by the measure developer on January 13, 2016.

## Copyright Statement

This NQMC summary (abstracted Institute for Clinical Systems Improvement [ICSI] Measure) is based on the original measure, which is subject to the measure developer's copyright restrictions.

The abstracted ICSI Measures contained in this Web site may be downloaded by any individual or organization. If the abstracted ICSI Measures are downloaded by an individual, the individual may not distribute copies to third parties.

If the abstracted ICSI Measures are downloaded by an organization, copies may be distributed to the organization's employees but may not be distributed outside of the organization without the prior written consent of the Institute for Clinical Systems Improvement, Inc.

All other copyright rights in the abstracted ICSI Measures are reserved by the Institute for Clinical Systems Improvement, Inc. The Institute for Clinical Systems Improvement, Inc. assumes no liability for any adaptations or revisions or modifications made to the abstracts of the ICSI Measures.

## Production

### Source(s)

Goblirsch G, Bershow S, Cummings K, Hayes R, Kokoszka M, Lu Y, Sanders D, Zarling K. Stable coronary artery disease. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2013 May. 71 p. [98 references]

## Disclaimer

### NQMC Disclaimer

The National Quality Measures Clearinghouse<sup>®</sup> (NQMC) does not develop, produce, approve, or endorse the measures represented on this site.

All measures summarized by NQMC and hosted on our site are produced under the auspices of medical specialty societies, relevant professional associations, public and private organizations, other government agencies, health care organizations or plans, individuals, and similar entities.

Measures represented on the NQMC Web site are submitted by measure developers, and are screened solely to determine that they meet the [NQMC Inclusion Criteria](#).

NQMC, AHRQ, and its contractor ECRI Institute make no warranties concerning the content or its reliability and/or validity of the quality measures and related materials represented on this site. Moreover, the views and opinions of developers or authors of measures represented on this site do not necessarily state or reflect those of NQMC, AHRQ, or its contractor, ECRI Institute, and inclusion or hosting of measures in NQMC may not be used for advertising or commercial endorsement purposes.

Readers with questions regarding measure content are directed to contact the measure developer.